

REMARKS

In this Response, Applicant traverses the Examiner's rejections. Applicant's silence with regard to the Examiner's rejections of dependent claims constitutes a recognition by the Applicant that the rejections are moot based on the Remarks relative to the independent claim from which the dependent claims depend. Applicant reserves the option to further prosecute the same or similar claims in the present or a subsequent application. Claims 1-18 are pending in the present application.

Telephone Interview

Applicant acknowledges the courtesy extended by the Examiner and Examiner's supervisor in conducting a telephone interview with Applicant's Attorneys on February 3, 2004. During the interview, the Applicant's Attorneys and the Examiner discussed features of Applicant's claim 1 and the cited prior art reference to Plutowski. No agreement was reached.

In the Interview Summary dated February 4, 2004, the Examiner stated that the term "master membership grade" in claim 1 and the terms "scaling" and "averaging" in claim 16 "were not clear in the claims or specification as filed." Applicant respectfully disagrees and refers the Examiner to pps. 43-47, 62, 63, 67, and 68 of the specification as filed for a description of these claim terms.

Petition for Extension of Time

As provided in accompanying documents, Applicant petitions under 37 C.F.R. § 1.136(a) for a three-month extension of time in which to file this Response.

Claim Rejections

The Examiner rejected claims 1-3 and 6-18 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,474,851 to Plutowski in view of Plutowski's admitted prior art (hereinafter referred to as "Plutowski's APA").

The Examiner also rejected claims 4 and 5 under 35 U.S.C. § 103(a) as being unpatentable over Plutowski and Plutowski's APA and further in view of U.S. Patent No. 6,493,717 to Junkin.

Claims 1-18

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Applicant's independent claim 1 is directed to a method of associating different criteria on a page to one or more products. Among other things, Applicant's claim 1 includes *receiving option selections based on the different criteria*, assigning membership grades to the option selections, relating the option selections to the one or more products, and forming master membership grades for the one or more products based on the option selection membership grades.

In the Office Action, the Examiner stated that "Plutowski discloses ... receiving option selection[s] based on the different criteria (see column 1, lines 43-65, Plutowski [in which the] Examiner interprets the actions as products [and in which the] [E]xaminer interpret[s] the term polic[y] as criterion." The Examiner also stated that "[r]eferring to column 1, lines 43-65, Plutowski discloses different actions received from users as recommendations, which [are] interpret[ed] by the [E]xaminer as criteria and rank the selection by the highest ranked action."

Applicant disagrees with the Examiner's interpretation of Plutowski's policy as Applicant's claimed criterion. As described in Plutowski col. 1, ll. 43-45, a "policy" represents a mapping between a stimulus and a set of candidate actions. The policy ranks the set of candidate actions by assigning either selection probabilities (e.g., Plutowski Figs. 1A, 1B, 1E, and 1F) or degrees of membership (e.g., Plutowski Figs. 1C and 1G-1I) to the candidate actions. Based on these rankings, the policy recommends a candidate action for selection or execution, such as the candidate action having the highest rank. (Plutowski col. 1, ll. 57-60.) As described in Plutowski, col. 8, ll. 30 ff, two policies that map the same set of candidate actions to the same stimulus are overlapping policies. Overlapping policies "can ... correspond to different ways of measuring *a single criterion* (e.g., 'user preference' can be measured multiple ways, e.g., by first-person subjective opinion via questionnaire, passive observation of actual tendencies, or by comparison to other similar people via collaborative filtering)." (Plutowski col. 10, ll. 38-43) (Emphasis supplied by the Applicant.) Since Plutowski's policies can correspond to different ways of measuring *a single criterion*, Plutowski's policies cannot be the single criterion itself. If the Examiner's interpretation of Plutowski's policies as Applicant's claimed criteria were correct, then, on the basis of the statement in Plutowski col. 10, ll. 38-43, Plutowski's policies would correspond to different ways of measuring themselves. This is not a sensical result.

Applicant notes that Applicant's claim 1 *receives option selections based on different criteria and assigns membership grades to the option selections*. In one embodiment, these

claim features can be represented as a fuzzy logic mapping that maps different criteria to option selections and assigns membership grades to the option selections. In one such embodiment, therefore, Applicant's claimed criteria can correspond to Plutowski's stimuli (and not Plutowski's policies), Applicants' claimed option selections can correspond to Plutowski's candidate actions, and Applicant's claimed membership grades can correspond to Plutowski's degrees of membership.

Plutowski describes several different scenarios in which overlapping policies *for the same criterion* are combined to generate a single composite policy *for that exact same criterion*. Most relevantly, Plutowski Fig. 1G shows a first fuzzy logic policy being combined with a second overlapping fuzzy logic policy via Plutowski's mixing function to generate a composite fuzzy logic policy. As shown in Fig. 1G, the first fuzzy logic policy assigns degrees of membership to candidate actions labeled Action ID 1-5, the second fuzzy logic policy also assigns degrees of membership *to the same candidate actions* labeled Action ID 1-5, and the composite fuzzy logic policy assigns composite degrees of membership to, yet again, *the same candidate actions* labeled Action ID 1-5. Based on Plutowski, col. 8, l. 58 to col. 10, l. 5, the first and second fuzzy logic policies use first and second data sets, respectively, to map the *same set of candidate actions* to the *same stimulus*. Moreover, at col. 10, ll. 38-43, Plutowski describes the overlapping policies (e.g., first and second fuzzy logic policies of Fig. 1G) as "different ways of measuring *a single criterion*." The axes, description, and annotations of Plutowski's Fig. 1G support this teaching by showing two overlapping policies *for a single, same criterion* being combined to generate a composite policy *for the same single criterion*.

In contrast, Applicant's claim 1 includes *receiving option selections based on different criteria*. Plutowski and Plutowski's APA do not teach mixing policies that map different criteria to the candidate actions. Rather, as previously described, Plutowski and Plutowski's APA mix overlapping policies that map *the same single criterion* to candidate actions. As such, neither Plutowski nor Plutowski's APA teaches the feature of Applicant's claim 1 directed to *receiving option selections based on different criteria*.

During the telephone interview on February 3, 2004, the Examiner cited a new portion of Plutowski as support for the Examiner's contention that Plutowski teaches Applicant's claimed *different criteria*. Specifically, the Examiner cited col. 9, ll. 10-40 of Plutowski and interpreted

references therein to on-site browsing behavior, explicit user profile or questionnaire, and past purchase history to read on Applicant's claimed different criteria.

Applicant vigorously, but respectfully, disagrees with the Examiner's interpretation. When read in context, the newly cited portion of Plutowski merely describes further instances in which Plutowski uses different types of information (e.g., user profile or questionnaire, and past purchase history) to form overlapping policies that map *the same single criterion* of user preference, to candidate actions, whereupon Plutowski teaches how such overlapping policies can be mixed.

In Plutowski col. 8, l. 55 to col. 10, l. 5, Plutowski describes an application of his system. (Plutowski col. 8, ll. 56-57.) In the application, Plutowski's system includes three different servers. (Plutowski col. 9, ll. 23-24.) Each server controls the manner in which exactly the same set of resources (e.g., product recommendations) are to be presented to a single online shopper. (Plutowski col. 8, ll. 58-64.) Each server wields a policy (i.e., a mapping of candidate actions to a stimulus) that dictates which resources are to be presented to the single online shopper. (Plutowski col. 8, ll. 58-64.) Each server uses a different type of information in formulating the same policy that relates user preference (a single criterion) to candidate actions: the first server uses the shopper's on site browsing behavior, the second server uses the shopper's explicit user profile or questionnaire, and the third server uses the shopper's past purchase history. (Plutowski col. 8, ll. 65-67 and col. 9, ll. 23-28.) Even though each server operates on a different type of information, there is only one category or criteria of information, i.e., the shopper's preferences. (Plutowski col. 9, ll. 9-13.) As a result, Plutowski explicitly and unequivocally states that "at the most important level ... these servers are wielding *overlapping policies*." (Plutowski col. 9, ll. 14-16.) (Emphasis supplied by the Applicant.) As previously described herein, Plutowski's *overlapping policies* "can ... correspond to different ways of measuring a *single criterion* (e.g., 'user preference' can be measured multiple ways, e.g., by first-person subjective opinion via questionnaire, passive observation of actual tendencies, or by comparison to other similar people via collaborative filtering)." (Plutowski col. 10, ll. 38-43) (Emphasis supplied by the Applicant.) Plutowski then describes how he mixes these *overlapping policies*. (Plutowski col. 9, ll. 28 to col. 10, l. 5.)

Since Plutowski explicitly and unequivocally states that the servers that formulate their policies based on the on-site shopping behavior, the explicit user profile or questionnaire, and the

past purchase history wield *overlapping policies*, i.e., policies that map *the same single criterion* ("user preference") to the same set of candidate actions, the newly cited portion of Plutowski does not teach mixing policies that map different criteria to candidate actions. As such, the newly cited portion of Plutowski does not teach the feature of Applicant's claim 1 directed to *receiving option selections based on different criteria*.

Since neither Plutowski nor Plutowski's APA teaches *receiving option selections based on the different criteria*, neither can teach any of the other features of Applicant's claim 1 directed to assigning membership grades to the option selections, relating the option selections to the one or more products, and forming master membership grades for the one or more products.

In summary, neither Plutowski nor Plutowski's APA, whether considered separately or in combination, teaches the features of Applicant's independent claim 1 that include *receiving option selections based on the different criteria, relating option selections to the one or more products, and forming master membership grades for the one or more products based on the option selection membership grades*.

Applicant thus traverses the Examiner's rejection of independent claim 1, and Applicant considers independent claim 1 to be allowable. Since claims 2-18 depend from independent claim 1, Applicant also considers claims 2-18 to be allowable as depending on an allowable base claim, thereby traversing the Examiner's rejections of such claims. As such, Applicant's failure to specifically respond to the Examiner's rejections of dependent claims 2-18 does not provide, and should not be construed as, an acquiescence to the Examiner's rejections of such claims.

Based on the foregoing Amendment and Remarks, Applicant traverses the Examiner's rejections of claims 1-18 under 35 U.S.C. § 103(a).

CONCLUSION

Based on the foregoing Amendment and Remarks, this application is in condition for allowance. Accordingly, Applicant requests allowance.

Applicant invites the Examiner to contact the Applicant's Attorney if any issues are deemed to remain prior to allowance.

Respectfully submitted,
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Date:

April 1, 2004

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